



The Comnet CNMCSFP electrical-to-SFP based optical Ethernet media converters accept a 10/100 or 1000 Mbps electrical input and convert it to a 100 or 1000 Mbps optical output (selected by a dip switch) and the 100/1000 Mbps optical input back to the 10/100/1000 Mbps electrical output. Auto-Negotiating is supported on the copper interface side. These devices use either one or two optical fibers, depending upon the selection of sold-separately SFP[†] optical module. A PoE model, the CNMCSFPPOE/M meets the IEEE802.3at standard and provides 30 watts of PoE+ power. The series consists of a small-size single channel model, CNMCSFP/M; a ComFit standard size, single-channel model, CNMCSFP; a dual channel model, CNMC2SFP; and a quad channel model, the CNMC4SFP.

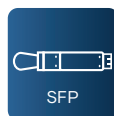
[†] Small Form-Factor Pluggable Module. Sold separately.



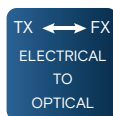
HARDENED
-40° TO +75°C



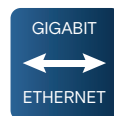
30W PoE+



FLEXIBILITY
SFP



CONVERTER



1, 2, OR 4

KEY FEATURES

- ▶ Full-duplex transmission of 10/100/1000 Mbps Ethernet
 - 10/100/1000BASE-T(X) electrical port
 - 1000BASE-FX or 100BASE-FX SFP Ports
- ▶ 10/100/1000 BASE-T(X) port supports auto-negotiation and automatic MDI/MDI-X crossover for full and half-duplex operation
- ▶ Uses customer-installed Comnet SFPs for compatibility with a wide range of optical fibers, optical connector types, and optical transmission distances of up to 120 km
- ▶ Designed for installation in harsh out-of-plant/unconditioned industrial or roadside operating environments (-40° to +75°C ambient). Fully compliant with the environmental requirements of NEMA TS-2 for Traffic Signal Control Equipment
- ▶ Voltage transient protection on all power and signal input/ output line provide protection from voltage surges and other transient events
- ▶ Mini-package size of the CNMCSFP/M allows the unit to be installed in those locations where space is at a premium.
- ▶ Supports Jumbo Frames up to 10K Bytes for streaming video applications
- ▶ Bi-color LED status indicators confirm operating status
- ▶ Hot-swappable rack modules
- ▶ Available in small-size, ComFit interchangeable stand alone or rack unit single and dual models (non PoE-Models)
- ▶ TAA & NDAA Compliant
- ▶ Limited Lifetime warranty
- ▶ Made in the U.S.A.

APPLICATIONS

- ▶ Optical transmission of Ethernet-compatible industrial security access control systems, intercom systems, VOIP (Voice over IP) telephony networks, and IP-compatible CCTV camera surveillance networks
- ▶ Optical Ethernet transmission to wireless LAN access points
- ▶ Industrial Security, Transportation/ ITS, and Industrial Control/ Factory Automation IP Networks
- ▶ Optical transmission of any Ethernet-compatible equipment with a maximum data rate of 100 Mbps or 1000 Mbps



SPECIFICATIONS

Data

DATA INTERFACE	ETHERNET
DATA RATE	10/100/1000 MBPS IEEE 802.3 COMPLIANT FULL DUPLEX OR HALF DUPLEX ELECTRICAL PORT/ FULL DUPLEX OPTICAL PORT

Connectors¹

POWER	TERMINAL BLOCK
OPTICAL	SFP DEPENDENT
ELECTRICAL	RJ45
FIBER CONNECTORS	REQUIRES SELECTION OF SOLD-SEPARATELY SFP MODULES. SEE COMNET DATA SHEET FOR NUMBER AND DESCRIPTION OF SFP MODULES.

Power

OPERATING VOLTAGE RANGE	NON-POE: 9-24 VDC OR 24 VAC POE: 48 – 57 VDC @ 0.85A
POWER CONSUMPTION	CNMCSFPPOE/M: 35 W (WITH FULL POE+ LOAD) SURFACE MOUNT: 2.5 W 1CH, 5 W 2CH, 10 W 4CH
CURRENT PROTECTION	AUTOMATIC RESETTABLE SOLID-STATE CURRENT LIMITERS

Electrical & mechanical

LED INDICATORS	OPTICAL LINK/DATA ACTIVITY > POWER POE ENABLED (CNMCSFPPOE/M ONLY)
CIRCUIT BOARD	MEETS IPC STANDARD
COMFIT SIZE	6.1 × 5.3 × 1.1 IN (15.5 × 13.5 × 2.8 CM)
COMFIT RACK SLOTS	1
MINI SIZE	3.3 X 2.5 X 1.1 IN (8.4 X 6.4 X 2.8 CM)
SHIPPING WEIGHT	<2 LBS./0.9 KG

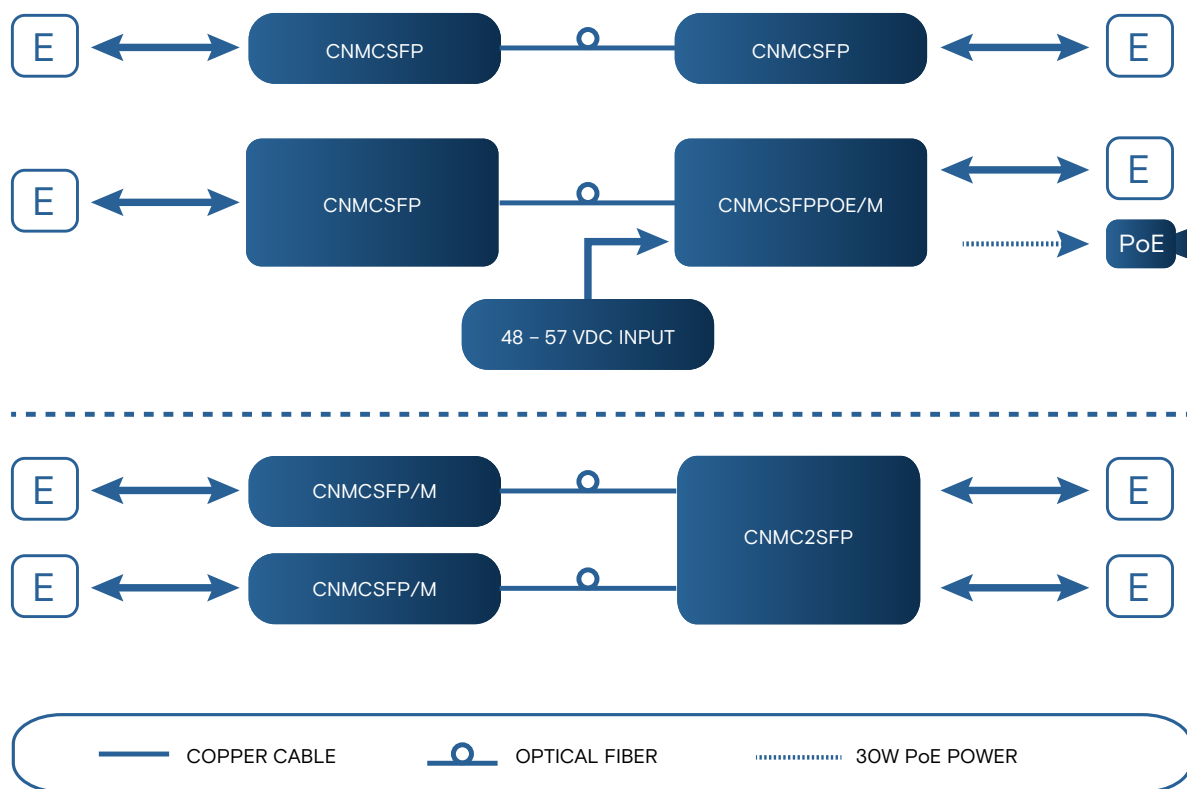
Environmental

MTBF	>100,000 HOURS
OPERATING TEMP	-40° C TO +75° C
STORAGE TEMP	-40° C TO +85° C
OPERATING RELATIVE HUMIDITY	0% TO 95% (NON-CONDENSING) ²

¹ Multimode fiber needs to meet or exceed fiber standard ITU-T G.651. Single mode fiber needs to meet or exceed fiber standard ITU-T G.652

² Add suffix '/C' for Conformally Coated Circuit Boards to extend to condensation conditions (Extra charge, consult factory) DIN-Rail MountingAdaptor Kit - With Mounting Hardware (Optional, order model DINBKT4)

TYPICAL APPLICATION



Fiber Count, Type and Distance are dependent on SFP selection

ORDERING INFORMATION

Part Number	Description	# Rack slots
CNMCSFP/M	MINI 10/100/1000MBPS ETHERNET MEDIA CONVERTER	N/A
CNMCSFPPOE/M	MINI 10/100/1000MBPS ETHERNET MEDIA CONVERTER WITH IEEE 802.3AT 30W POE+	N/A
CNMCSFP	COMFIT 10/100/1000MBPS ETHERNET MEDIA CONVERTER	1
CNMC2SFP	COMFIT DUAL 10/100/1000MBPS ETHERNET MEDIA CONVERTER	1
CNMC4SFP	COMFIT QUAD 10/100/1000MBPS ETHERNET MEDIA CONVERTER	1
OPTIONS	HARDENED POWER SUPPLY AVAILABLE, CONSULT FACTORY USER SELECTION OF COMNET SFP (SEE SFP MODULES DATA SHEET FOR PRODUCT NUMBERS AND COMPATIBILITY BEFORE ORDERING) [2] ADD SUFFIX 'C' FOR CONFORMALLY COATED CIRCUIT BOARDS TO EXTEND TO CONDENSATION CONDITIONS (EXTRA CHARGE, CONSULT FACTORY) DIN-RAIL MOUNTING ADAPTOR KIT - WITH MOUNTING HARDWARE (OPTIONAL, ORDER MODEL DINBKT4)	

NOTE: In a continuing effort to improve and advance technology, product specifications are subject to change without notice.